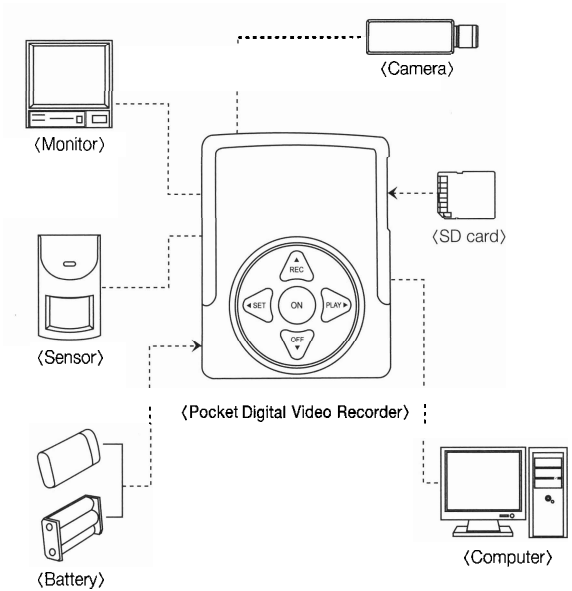
User's Manual
Video Digital Pocket Recorder

This package contains:

(1) Video Digital Pocket Recorder
(2) USB cable
(3) Battery pack
(4) AAA battery
(5) Gender(RCA jack · Phono jack)

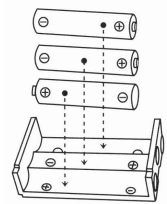
Ch.1 System configuration



Ch.2 Loading the Battery and Connecting the Power Adapter

2.1 Loading the AAA Battery on the Battery Pack

〈CAUTION〉 * Load the batteries shown. Reversing the polarity will damage the system.

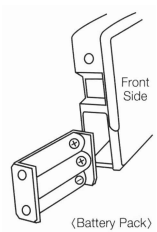


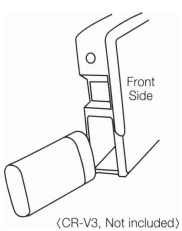
2.2 Loading the Battery Pack or CR-V3

〈CAUTION〉 * The CR-V3 battery and AAA battery pack can only be inserted into the orientation shown. If it does not easily install, reposition it and try again. Do not force it. Doing so can damage your system.

* Battery performance is reduced at temperatures below 41° F(5° C).

① Turn off the system.
② On the side of the system, slide the battery door to open.
③ Insert the battery pack or CR-V3 battery, as shown.
④ Close the battery door.



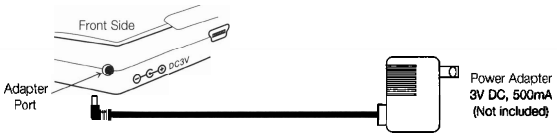


2.3 Connecting the AC/DC adapter

〈CAUTION〉 * Use only the AC/DC Power Adapter, 3-volt, Regulated, Center Plus and O.D. 3.5mm/I.D. 1.3mm adapter plug diameter. Other adapters may cause damage to your system

① Connect the AC/DC adapter to the adapter port shown.

② Connect the other end of the AC/DC adapter into an AC electrical outlet.



Ch.3 Connecting the External Sensor to the External Trigger Interface

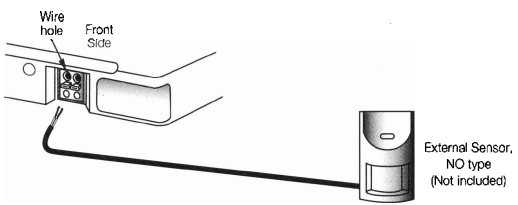
〈NOTE〉 * Use only the External Sensor, Normal Open(NO) and Dry Contact type.

* Use the wire, AWG16 to AWG26, and open the wire for about 5 mm.
* See your Sensor's guide for more exact wiring and installation.

① Press the button by using the screwdriver.

② To connect each wire(+,-), insert the wire in to the hole upper the button shown.

③ Then remove the screwdriver.



Ch.4 Inserting and removing the SD Card

〈CAUTION〉 * Removing a card during formatting or other operating and inserting a card during the power on may damage the card and so all videos.

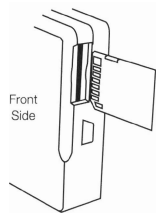
* The card can only be inserted one way: forcing it may damage the card and system.
* Please backup your videos to the computer as soon as you pull a SD card out. This system does not use Date Lock function of the SD card.

4.1 Inserting the SD Card

① Turn off the system.

② Orient the card, as shown

③ Push the card into the slot to seat the connector.



4.2 Removing the SD Card.

① Push the card in, the release it.

② When the card is partially ejected, pull it out.

〈NOTE〉 Video Storage Capacity (8KB/Frame)

Memory	2 fps	3 fps	5 fps	12 fps
16MB	16 min	11 min	65 min	2,7 min
32MB	33 min	22 min	13 min	5,5 min
64MB	66 min	44 min	26 min	11 min
128MB	133 min	88 min	53 min	22 min

Ch.5 How to initial set up

5.1 Turn On/Off

* Turn On
  Press the **ON** button until the indicating LED glows green for 2~5 seconds.
* Turn off
  Press the **OFF** button about one second while there is a live view on the monitor.

〈CAUTION〉 * The **OFF** button won't operate during the Menu, Record and Playback step.

5.2 Starting set-up the Menu

① Turn on the system.
② Press the **SET** button. The main menu screen appears
③ Press the **SET** button to exit the menu, if you want it.

5.3 Setting the Date & Time

① Press the **REC/OFF** button to highlight **1.DATE&TIME**, then press the **PLAY** button.
② Press the **PLAY** button to a dvance to the next setting.
③ Press the **REC/OFF** button to adjust the date and time.
④ When finished, press the **SET** button.
⑤ Press the **SET** button to exit the menu, if you want it.

〈CAUTION〉 * To install the system for the first time, or if the power has long been off, check if **1.DATE&TIME** are set up and otherwise set up them. All timer-related operations will be performed correctly only if they are set up.

5.4 Setting the Video Parameters

① Press the **REC/OFF** button to highlight **2.VIDEO**, then press the **PLAY** button. Then the live view appears on the monitor.
② Press the **PLAY** button to advance next settings, **COLOR, BRIGHTNESS, CONTRAST.**
③ Press the **REC** and **OFF** button to adjust the video parameters.
   * The factory default value of the **COLOR**: 96
   * The factory default value of the **BRIGHTNESS**: 120
   * The factory default value of the **CONTRAST**: 96
④ When finished, press the **SET** button.
⑤ Press the **SET** button to exit the menu, if you want it.

5.5 Setting the Record Frame Rate

① Press the **REC** and **OFF** button to highlight **3.FRAME RATE**, then press the **PLAY** button.
② Press the **PLAY** button to choice the frame rates.
③ When finished, press the **SET** button.
④ Press the **SET** button to exit the menu, if you want it.

5.6 Setting the Delay Time

〈NOTE〉This value is applied both as the delay time until image recording begins by pressing the **REC** button in the **SWITCH** mode (See **5.8 Selecting the Rocord Mode** below) and as that until monitoring begins in the **EXT IN** mode(See **5.8 Selecting the Record Mode** below).

① Press the **REC** and **OFF button to highlight 4.DELAY TIME, then press** the **PLAY** button.
② Press the **REC** and **OFF** button to adjust the delay time.
③ When finished, press the **SET button.**
④ Press the **SET** button to exit the menu, if you want it.

5.7 Formatting Memory

① Press the **REC** and **OFF** button to highlight **5.FORMAT**, then press the **PLAY** button.
② Press the **PLAY** button to select **YES.**
③ Press the **SET** button, if you want formatting.
④ Press the **SET** button to exit the menu, if you want it.

〈CAUTION〉 * Formatting erases all videos.
* Removing a card during formatting may damage the card.

* The factory default value of the **BRIGHTNESS**: 120
* The factory default value of the **CONTRAST**: 96

④ When finished, press the **SET** button.
⑤ Press the **SET** button to exit the menu, if you want it.

5.5 Setting the Record Frame Rate

① Press the **REC** and **OFF** button to highlight **3.FRAME RATE**, then press the **PLAY** button.
② Press the **PLAY** button to choice the frame rates.
③ When finished, press the **SET** button.
④ Press the **SET** button to exit the menu, if you want it.

5.6 Setting the Delay Time

〈NOTE〉This value is applied both as the delay time until image recording begins by pressing the **REC** button in the **SWITCH** mode (See **5.8 Selecting the Rocord Mode** below) and as that until monitoring begins in the **EXT IN** mode(See **5.8 Selecting the Record Mode** below).

① Press the **REC** and **OFF** button to highlight **4.DELAY TIME**, then press the **PLAY** button.
② Press the **REC** and **OFF** button to adjust the delay time.
③ When finished, press the **SET** button.
④ Press the SET button to exit the menu, if you want it.

5.7 Formatting Memory

① Press the REC and **OFF** button to highlight **5.FORMAT**, then press the **PLAY** button.
② Press the PLAY button to select **YES**.
③ Press the SET button, if you want formatting.
④ Press the SET button to exit the menu, if you want it.

〈CAUTION〉 * Formatting erases all videos.
* Removing a card during formatting may damage the card.

5.8 Selecting the Record Mode

① Press the **REC** and OFF button to highlight **6.REC MODE**, the press the **PLAY** button.
② Press the **PLAY** button to choice the **SWITCH** or **EXT IN**, then press the **SET** button.
③ Press the **SET** button to exit the menu, if you want it.

〈NOTE〉 * **SWITCH** Mode; It's manual record mode. Press the **REC** button with the power on to record an image.
* **EXT IN** Mode; It's automatic Arming mode.
In this mode, "**ENTER ARMING : xx**" will appear on the monitor.

Here, "**xx**" means the setted delay time(See **5.6 Setting the Delay Time** upper). If the **SET** button in pressed before this delay time becomes 0, the **EXT IN** mode will be cancelled and the **SWITCH** mode will be set automatically. After the delay time, the power will be off; if the external input terminal is triggered (it is shortened), the power will be on automatically and then off after recording an image during the fixed record time(See **5.9 REC TIME** below).

* To cancel the **EXT IN** mode, press the **ON** button to turn on the monitor, and then, press the **SET** button for 2 seconds.

Then, the menu screen appears on the monitor. Here, change the mode from the **EXT IN** mode to the **SWITCH** mode in the **6. REC MODE**.

* **No button but the ON** and **OFF** button operates in **EXT IN** mode.
* There is delay time of four to five seconds to operate the system between the external trigger input at the **EXT IN** mode and the recording.

5.9 Setting the Record Time(Video Clip Size)

① Press the **REC** and **OFF** button to highlight **7.REC TIME**, then Press the **PLAY** button.
② Press the **PLAY** button to adjust the record time, then press the **SET** button.
③ Press the **SET** button to exit the menu, if you want it.

5.10 Setting the Power Saving Time

〈NOTE〉 The system will be shut off automatically without any operation for the power off time.

① Press the **REC** and **OFF** button to highlight **8.POWER OFF**, then press the **PLAY** button.

② Press the **REC** and **OFF** button to adjust the power off time, then press the **SET** button.

③ Press the **SET** button to exit the menu, if you want it.

Ch.6 How to record and retrieve your videos

6.1 How to record images manually

① Connect the system to the TV monitor and camera.

② Press the **ON** button to check if the LED is on and then wait for five seconds to see the system on.(Provided that the system is not already being operated)

③ **6. REC MODE** in the setting menu must be the **SWITCH** mode.

④ Press the **REC** button, and the Green LED will blink for the fixed delay time.
After the delay time, the image will be stored according to the frame rate.

⑤ Press the **REC** button to stop recording.

〈CAUTION〉 * If you turn off the system during recording process, you should loss video file on process.

6.2 How to retrieve images through monitor

① Connect the system to the TV monitor and camera.

② Press the **ON** button to check if the LED is on and then wait for five seconds to see the system on.(Provided that the system is not already being operated)

③ Press the **PLAY** button, and the TV screen will be on and the "current image number and the total of images stored" will appear on the upper right part of the screen.

④ Use the **REC/OFF** button(retrieving stored images up and down)and the **PLAY** button(playing back an image)to see the image stored.

⑤ Press the **SET** button to exit playback.

6.3 How to playback images through USB cable

① Turn off the system.

② Please plug the USB cable into your system and computer.
Your system will be turned on automatically and Green LED on.

③ Then you can find the message of Windows® Media Player® to open the file in Windows® Media Player®. If you select "Yes", you can find your video files.

④ If you want to close viewing files, please disconnect USB cable from computer. Then you can turn off your system.

6.4 How to playback images through card reader

① Turn off the system and release the card.

② Connect the card reader to the computer and insert your card into a computer with an SD slot.

③ See your computer user's guide for details.

Ch.7 Indicating L.E.D

7.1 When the power is turn on,
- LED glows on Green.

7.2 When the **REC** button is pressed in the SWITCH mode,
- Green LED blinks for the delay time and then glow on Red.

7.3 Between setting of the EXT IN mode and entry into the Arming,
- Green LED blinks for the delay time and then turn off.

7.4 In the memory full,
- LED glows on Green and Orange alternately and the exit to live view screen.

Ch.8 Trouble shootings

Problem	Cause	Solution
System does not turn on	① Battery is out ② Battery(battery pack) is not properly installed	☞ Change or Recharge the battery ☞ Reinstall the battery or battery pack
System does not record or playback	① Storage is full Card is corrupted When the system is on the Arming status	☞ Transfer videos to the computer, then format the card ☞ Insert a new card. Or reformat the card ☞ Confirm your menu (See Ch. 5.8 Selecting the Record Mode)
System does not appears live view	① Camera is defected ② Video cable is not securely connected or defected	☞ Change the camera ☞ Connect the video cable again or change the video cable
Live view is bad	① Camera is defected ② Video cable is not securely connected or defected ③ Video setting failure ④ TV monitor is defected	☞ Change the camera ☞ Connect the video cable again or change the video cable ☞ Re-setting the video parameters (See Ch. 5.4 Setting the Video Parameters) ☞ Change the TV monitor
The system will be turned off right after turn on	① Battery is out ② No SD card inserting ③ Card is not properly inserted in system ④ When the system is set on the EXT IN mode	☞ Change the battery ☞ Insert SD card ☞ Remove and insert a card properly again ☞ Confirm your menu (See Ch. 5.8 Selecting the Record Mode)
No LED glowing	① When the system is set on the EXT IN mode	☞ Confirm your menu (See Ch. 5.8 Selecting the Record Mode)
The computer can not recognize the system	① USB cable is not securely connected or defected ② Computer does not find a proper Windows version or Driver ③ Battery is out	☞ Connect the cable again or change the cable ☞ Confirm your O/S in your computer (See Ch.10 System Specifications) ☞ Change the battery
PC does not play back the SD card	① SD card is defected	☞ Formatting or change the card
Date and time have been unmatched	① The battery has been removed or exhausted for more than two hours	☞ Change the battery
System does not turn off	① When the system is set on the NEVER in the POWER OFF mode ② A non-approved battery may be in the camera	☞ Confirm your menu (See Ch.5.10 Setting the Power Saving Time) ☞ Use an approved battery (See Ch. 9 Expected Battery Life)
Last video clip is missing	① The card was removed while the system is recording ② The battery expired while the system is recording	☞ Do not remove card while the system is recording ☞ Keep battery powered

Ch.9 Expected Battery Life

Descriptions	Battery manufacturer	Record fully	Playback fully	Live view fully
Li Ion Battery, Non-rechargeable	Panasonic, Sanyo	100 min	120 min	125 min
Li Ion Battery, Rechargeable	Panasonic, Sanyo	55 min	70 min	75 min
AAA Alkaline Battery, Non-rechargeable	Energizer, Duracel, Bexel	50 min	65 min	65 min

Ch.10 System Specifications

Power	CR-V3 Li Ion battery, AAA Alkaline battery, 3V AC/DC Adapter
Recording option	Fixed only
Live view resolution	640 × 480 pixels
Record/Playback resolution	320 × 240 pixels
Recordign mode	Switch and Ext In
System memory	Internal Flash Memory(Optional) & SD card (Optional)
Frame rate	2, 3, 5, 12 fps
Video clip size	20, 30, 40, 50 or 60 sec
Delay time	0 ~ 990 sec
Video input terminal, phono jack	1
Video output terminal, phono jack	1
USB connector	1
SD card slot	1
External sensor trigger input terminal	1(for Isolated dry contact, NO Type)
Operating temperature	32 ~ 104°F
O/S	Windows 98(2nd edition), Windows Me, Windows 2000, Windows XP
Image Viewer	Windows® Media Player®
Dimension(inch, w/o belt clip)	2.5"(W) ×3.3"(H)×1.1"(T)
Weight(CR-V3 battery included)	2.85(4.25) OZ